

**Dario L. Ringach and J. David Jentsch**  
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## Enough Is Enough

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TO THE EDITOR: The ultimate scientific mission of our community is to understand how the brain works in health and disease. Because the functions of the brain depend on molecular, cellular, and network level processes, achieving this goal requires the ability to directly interrogate those mechanisms. Doing such work in humans would require the development of noninvasive techniques at appropriate spatial scales of resolution—technology that is not going to be available in the foreseeable future. As a consequence, progress in many areas of neuroscience relies on the use of invasive methods in animals. If we were to stop such work, both the ability to advance our field and the ultimate, desired development of alternative, noninvasive methods, would largely come to a halt.

The need for direct, invasive studies is not unique to neuroscience; however, the absolute necessity for research on complex organisms, including nonhuman primates, is. Whether studying sensory processing, motor planning and execution, memory processes, and executive cognitive functions, nonhuman primates, by virtue of their close phylogenetic relationship to humans, makes them indispensable subjects that play a unique, irreplaceable role in our endeavor to address disorders of the CNS.

These facts, although self-evident to most scientists, are not appreciated by animal rights activists that attack our research on at least two grounds. First, they argue that research in animals cannot—and will not—produce the knowledge necessary to lead to cures for human disease. Second, they argue that even if such cures could be found using animals, work with animals is unethical and should not be performed at all.

These views are gathering new adepts on a daily basis, largely because they are presented to the broad public without an opposing force from the scientific community or from the governmental agencies that fund the studies. One consequence of this situation has been a dramatic increase in animal rights extremism in recent years. At UCLA, we have seen our cars and homes set ablaze or flooded. We have been sent letters packed with razors and received countless death threats. Our children and neighbors have been terrorized. Misguided activists within the Los Angeles community openly incite others to violence and then brag about the resulting crimes, going so far as to call plots for our assassination “morally justifiable.”

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Despite being in the spotlight, our work is not different from the majority of articles appearing in the pages of this Journal and has always been in compliance with all the regulations on the use of animals in research. Investigators using primates, mice, or flies have been assaulted, so nobody can feel at ease. With an expanding list of investigators listed in the extremists’ crosshairs, it is clear that anybody could be next.

*Enough is enough!* We believe time has come to express our outrage at the activities of animal rights extremists and to request from our political representatives the security we and our families need to carry out our work. We believe that time has also come to discuss, debate, and express our opinions on the importance and ethics of animal research. Perhaps, most important, the time has also come to defend our research collectively and not to let only those under attack confront their plight alone.

On April 22nd, a new organization, Pro-Test @ UCLA, held a rally of 700 scientists, staff, and students that stood together in favor of the responsible use of animals in biomedical research and in solidarity with those under attack. At the event, Americans for Medical Progress, Speaking of Research, and Pro-Test @ UCLA called on our community to add their signatures to a petition in support of research and against animal extremists. A similar petition in the UK, crafted in response to attacks on Oxford University, was signed by a number of politicians, including then Prime Minister Tony Blair. This was a critical milestone that marked the turn against extremists and their agenda in the UK.

We ask that you join us in mobilizing the entire scientific community to defend biomedical research. You can start with the easy step of signing the petition at [www.raisingvoices.net](http://www.raisingvoices.net), which already counts with nearly 10,000 signatories. Write to your representatives explaining the dangers of the escalating animal rights extremism for basic and translational research and urge your colleagues to do the same. Reach out to your students and local communities to explain the value of research; no one has a greater responsibility for explaining and defending your research than you do. If you teach medical students, make sure they understand the contribution of animal research to the material they are learning. Come up with your own ideas about how to make a difference and share them with us.

Together we can have a profound impact on what is growing into an important public debate. If we stand together as a community, we will be heard.